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Development And Accreditation Of A New Study Programme For A European Master Degree In Nutrition Studies

Doina Miere^{a*}, Lorena Filip^a^a Department of Bromatology, Hygiene, Nutrition, University of Medicine and Pharmacy “Iuliu Hațieganu”, 6 Pasteur Street, Cluj-Napoca, Romania

Abstract

The last decades have seen the nutrition sciences experience an explosive progress at global level and find applications in key areas of public health and personal protection. WHO/FAO recommendations and EU action platforms underline the need for a larger and more efficient promotion of healthy food habits and of a healthy lifestyle. In this context, we have developed the Master Programme entitled “Nutrition and Life Quality”. The objectives and topics of this programme put it in line with the agenda of the health policies of the European Union. Its main objective is the promotion of balanced food in a context of healthy lifestyle, increased quality of life, and provision of individual and collective welfare, prevention of illnesses. The curricula include specialised subjects studying nutrition physiology and physiopathology, nutritional psychology, clinical and community nutrition, nutrition for sportsmen and sportswomen, study of food supplements and functional food, food safety and security, etc., as well as modules ensuring training of the graduates for a teaching carrier or for scientific research. The “Nutrition and Life Quality” Master Programme ensures addition and improvement of the qualification of graduates of various Bachelor's Degree programmes of the University of Medicine and Pharmacy, while ensuring the possibility of advanced studies (Bologna II) for the graduates of the Bachelor's Degree programme for Nutrition and Dietetics (Bologna I).

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1. Introduction

Food is one of the big issues to which the population in Romania and in the whole world is confronted with. The World Health Organisation identifies unhealthy food as a major risk factor in the occurrence of chronicle diseases: cardiovascular diseases, obesity, cancer, diabetes, etc. (WHO Global Strategy on Diet, 2004). In Europe, 6 out of the

* Doina Miere. Tel.: +2-321-321-3111.

E-mail address: doinamiere@yahoo.com

7 main risk factors for early death – blood pressure, cholesterol, and body mass index, insufficient consumption of fruit and vegetables, absence of physical activity, excessive consumption of alcohol – are related to food habits and to absence of exercise. The European Commission is in favour of an integrated approach of nutrition and physical activity, by active involvement of health specialists at local, regional and national level, in all Europe, together with other stakeholders who may co-work in synergy in order to increase life quality (EU platform, 2005; Status report on the European Commission's, 2011). A balanced diet and regular physical exercise are key factors for maintaining a good state of health. Among European citizens, excessive calories intake and sedentary lifestyle determine an increase in the number of overweight and even obese people both among adults and children (Status report on the European Commission's, 2011). In this context, food and physical activity are priority key areas within EU public health policies. The European Union finds it necessary to have well prepared specialised staff in the area of nutrition and life quality, whose actions should be mainly intended to raising people's awareness, to improving food habits and to promoting physical activity (EU platform, 2005) this specialised staff mainly consists of dieticians, who must join their efforts to the other health specialists. Studies concerning the difference between the professional activity and the responsibility of the dietician with a Bachelor's degree and those of a dietician who completed his or her studies within a Master degree programme in the area of nutrition reveal that education may influence involvement in the professional activity of these specialists (Kotkin 2011; Dodds, 2003). However, practice experience may affect the responsibility and individuals supervised. (Kotkin 2011.; Brody 2012)

2, Development, accreditation and implementation of the university study programme for a Master Degree in Nutrition and Life Quality

Romania, as Member State of the European Union, must prepare its own specialists in such important area as nutrition, which is a particularly multidisciplinary science, and their training must be completed by Master degree university studies. A Master degree university programme can currently be run in Romania on the basis of an accreditation from the Romania Agency ensuring Quality in Higher Education (ARACIS) granted by commissions of experts specialised in this respect (ARACIS, 2013). In 2011, ARACIS accredited the Master degree university programme in "Nutrition and Life Quality" within "Iuliu Hatieganu" University of Medicine and Pharmacy in Cluj-Napoca with a duration of 4 semesters and accounting for 120 credits. The line of study within the Master degree in "Nutrition and Life Quality" is human nutrition, with applications in the area of health, whose objective is the promotion of balanced food in the context of a healthy lifestyle, the increase in life quality, the insurance of individual and collective welfare, the prevention of diseases. The Master degree programme is mainly oriented towards professionalization, as its purpose is to ensure further studies for the graduates of the Bachelor degree programme in Nutrition and Dietetics, as well as to develop their scientific research capacity; moreover, the Master degree offers the possibility to obtain complementary competences to the graduates of other Bachelor degree studies in related areas. In order to attend this Master degree programme, it is necessary to have knowledge in the areas of biology, chemistry, nutrition elements, food chemistry, hygiene, pathology, public health, which is knowledge acquired within the Bachelor degree programmes that are generally and sectorially regulated in the area of "health". The nutrition education in Romania is currently in an incipient stage both in terms of Bachelor degree study programmes and Master degree programmes. The first Bachelor degree study programme in Nutrition and Dietetics in Romania was started in 2007 within "Iuliu Hatieganu" University of Medicine and Pharmacy in Cluj-Napoca, it received *temporary authorisation from ARACIS* and it is currently applied in other medicine and pharmacy universities in Romania (Târgu Mureş, Iaşi, Timişoara, Arad), which also have temporary authorisation. The Bachelor degree study programme in Nutrition and Dietetics within "Iuliu Hatieganu" University of Medicine and Pharmacy in Cluj-Napoca was authorised and is run within the Faculty of Pharmacy. Moreover, the Faculty of Pharmacy provides an optional subject matter of Diet Therapy within the 5 year Bachelor degree study programme in Pharmacy, and the Faculty of General Medicine included a mandatory module on Diabetes, Nutrition and Metabolic Diseases. Concerning the Master degree programmes, when this Master degree programme was accredited, two other Master degree programmes in this area were running in Romania, namely the "Bases of Clinical Nutrition" with a duration of 2 semesters at UMF Iaşi, and "Nutrition Sciences" at "Babes-Bolyai" University in Cluj-Napoca. In terms of addressability, the Master degree programme in *Nutrition and Life Quality* is addressed to the graduates of Bachelor degree programmes regulated generally and sectorial at the University of Medicine and Pharmacy, as well as to graduates of the Faculties of Biology, Biochemistry, Chemistry, etc., or at the University of Agricultural Sciences and Veterinary Medicine with a minimum of 180 credits cumulated during the

Bachelor degree programme. For the graduates of the Bachelor degree programme in Nutrition and Dietetics (cycle Bologna I), this Master degree programme is intended as further studies and is a continuation of university training within cycle Bologna II. Students are recruited by entry exam, and they may enter for the entry competition on the basis of the diploma attesting the previous Bachelor degree and/or Master degree studies. The Master degree in *Nutrition and Life Quality* established as mission to provide theoretical and practical training for specialists with multidisciplinary education, who should be able 1) to provide nutrition counselling to patients in various physiological or pathologic situations and to develop individualised food programmes for them; 2) to identify problems determined by nutrition errors or other elements related to the lifestyle, in accordance with the principles of health protection and promotion; 3) to develop an educational activity intended to adopt optimum nutrition and sustained physical activity as elements of a healthy lifestyle, in order to prevent certain diseases of the modern society with worrying incidence; 4) to involve in ensuring high quality of food and to carry out food analysis, testing of new food and food supplements through advanced technologies; 5) to develop nutritional plans and strategies for various categories of people (according to age, geographical areas – e.g. less-favoured areas). Taking into consideration its objectives and theme, this Master degree programme is in line with the health policy agenda of the European Union. The specific objective of the Master degree programme in *Nutrition and Life Quality* is to train high quality specialists in the area of human nutrition, who shall find their place in clinical activity, specialised medical centres, health centres, in teaching activities, patient counselling practices, food analysis and quality control laboratories, food industry, medical and pharmaceutical research, in public health administrative structures and organisations. The curriculum contains subject matters that detail fundamental concepts approached during the Bachelor degree programme, as well as specialised subject matters that allow to synthesize and integrate the information in order to settle certain professional issues in the specialised area or in order to start and carry out a specialised research activity. Concretely, the courses in the curriculum deal with nutrition physiology and physiopathology, nutritional psychology, clinical and community nutrition, nutrition for sportsmen and sportswomen, the study of food supplements and functional food, medicine-food interactions, influence of culinary and industrial technological processes on the chemical composition and nutritive value of foodstuffs, food safety and security. The Master degree programme also includes modules that ensure training of the graduates for a teaching carrier or for scientific research. The analytical curricula of the courses are in line with the mission and objectives of the Master degree programme and ensure specialised training oriented towards nutritional practice, research and analysis. The teaching staffs involved in the running of this study programme has permanent positions in higher education, with almost 90% of permanent teaching staff at “Iuliu Hatieganu” University of Medicine and Pharmacy, and the rest consisting in associated staff with permanent positions in well-known universities from Cluj-Napoca (Babes-Bolyai University and the University of Agriculture Sciences and Veterinary Medicine). The director of this Master degree programme is full professor at “Iuliu Hatieganu” University of Medicine and Pharmacy and he is the initiator of the Bachelor degree programme in „Nutrition and Dietetics”, as well as president of the Romanian Association for Nutrition and Health. The Master degree programme uses the material basis of “Iuliu Hatieganu” University of Medicine and Pharmacy – classrooms, laboratories, computer laboratories, library -, which is in line with the standards for a high quality instructive-educative process. The teaching staff stays in permanent contact with the students, especially via e-mail, they have weekly office hours, and the students have set up a group on the internet where they get information and exchange professional opinions. The on-going testing within the Master degree programme concerns the assessment of student’s capacity to use the theoretical knowledge and the data found in the literature in order to solve practical cases or to deal with a research topic. The Master degree studies end through a final exam, which implies the carrying out of a scientific or applicative research activity.

3. Evaluation and discussions

Ever since the first year of implementation, the Master degree programme in *Nutrition and Life Quality* has enjoyed a lot of interest from the graduates of the Bachelor degree programmes in our university and in other universities, and the number of students who entered for and passed the entry exams has constantly increased in the following years. The first class graduated in 2013, and the quality of their dissertation papers, the chosen topics and their involvement in drafting of these papers revealed the increased interest and the passion of the students for the area of nutrition and for this Master degree programme. The analysis of the Master degree programme in *Nutrition and Life Quality* from creation to present has revealed the following:

- The implementation of a Master degree programme in nutrition had become urgently necessary in a context of more and more scientific evidence concerning the connection between nutrition and life quality, and taking into consideration the WHO and WHO/FAO recommendations, as well as the action platforms of the EU, which had underlined several times the need for larger and more effective promotion of healthy food habits and lifestyle.
- The objectives and topics of the *Nutrition and Life Quality* programme put it in line with the agenda of the health policies of the European Union and create the premises for the training of highly qualified specialists in a poorly developed field, but which is urgently required on the labour market in Romania.
- This programme is highly attractive for the professionals who already work in the field and who want to improve their level of knowledge and performance, as well as to adapt themselves to the new requirements on the labour market, but also for youth who want to work in this competence field in the future.
- The last decades have seen the research in the area of nutrition sciences experience an explosive progress worldwide, which has created premises for orienting the Master degree programme more towards research activities and increasing the number of graduates to take up PhD studies. Number of graduates and students of the Master degree in *Nutrition and Life Quality* have been involved in European research programmes and appreciated within the teams to which they belong for their professional skills and the competences of young researchers. One of the strengths of the Master degree programme is the modern material basis that ensures the training of specialists that are able to use high performance research equipment. Moreover, the students have access to high level information sources at the library and during the courses.
- Concerning the curricula, the courses are under permanent restructuring, in an attempt to stay connected with the trend imposed by the scientific research in the field. Furthermore, a quality guarantee within this programme is the level of competence and national and international visibility of the teaching staff involved in the programme.

However, after careful analysis of the situation in Romania, it can be found that the role of nutrition in ensuring life quality is still insufficiently understood, in general, which consequently triggers limited understanding of the importance of such a Master degree programme. We also become aware of the existence of very attractive Master degree programmes in well-known European universities that might be an attraction to the graduates of the Bachelor degree programmes in Romania, as well as of the permanent increase in the number of best graduates of Bachelor degree programmes who want to emigrate in other European countries. Nevertheless, the Romanian market offers a series of opportunities and we believe that the increased concern for food quality, for higher life quality by adopting optimum nutrition as basic element of a healthy lifestyle, in the context of harmonisation of the Romanian legislation with the European legislation, shall certainly increase people's addressability to specialists for qualified nutrition counselling and shall stimulate the research activity in the field, which shall increase the specific professional insertion of graduates and the attractiveness of the study programme.

4. Conclusions

The Master degree study programme in *Nutrition and Life Quality* ensures addition and improvement of the qualification of graduates of the University of Medicine and Pharmacy - dietitians-nutritionists, kinetherapists, pharmacists, physicians and other specialists in the area of health - or of the graduates of related Bachelor degree programmes who are involved in nutritional counselling of the healthy and sick patient. This Master degree study programme ensures the possibility of advanced studies for the graduates of the Bachelor's Degree programme in Nutrition and Dietetics (Bologna I) and is a continuation of university education within cycle Bologna II. The progress of research in the area of nutrition sciences has created the premises for orienting the Master degree programme more towards research activities and increasing the number of graduates to take up PhD studies. The Master degree programme in *Nutrition and Life Quality* ensures education of highly qualified specialists in the area of human nutrition, who shall be found on the labour market in Romania in various institutions and specialised practices.

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